

SEQUENCE LISTING

<110> Huse, William D.

<120> Eukaryotic Expression Libraries and
Methods of Use

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<151> 2000-11-28

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<213> Mus musculus

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Ser Ser Ser Val Ala Tyr Met Asn
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agc cag agt gct aag cat atg aac
Ser Gln Ser Ala Lys His Met Asn
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Ser Gln Ser Ala Lys His Met Asn

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<400> 22

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Ala Thr Ser Arg Ala Ala Ser Gly
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Ala Thr Ser Asn Leu Ala Ser Gly
1 5

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<400> 28

Ala Thr Ser Asn Leu Ala Ser Gly
1 5

<210> 29

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<212> DNA

<213> bacteriophage P1

<400> 29

ataacttcgt ataatgtatg ctatacgaag ttat 34

<210> 30

<211> 34

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<223> mutant lox P

<400> 30

ataacttcgt ataatgtata ctatacgaag ttat 34

<210> 31

<211> 124

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<213> Streptoalloteichus hindustanus

<400> 31

Met	Ala	Lys	Leu	Thr	Ser	Ala	Val	Pro	Val	Leu	Thr	Ala	Arg	Asp	Val
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Ala	Gly	Ala	Val	Glu	Phe	Trp	Thr	Asp	Arg	Leu	Gly	Phe	Ser	Arg	Asp
			20					25					30		
Phe	Val	Glu	Asp	Asp	Phe	Ala	Gly	Val	Val	Arg	Asp	Asp	Val	Thr	Leu
		35					40						45		
Phe	Ile	Ser	Ala	Val	Gln	Asp	Gln	Val	Val	Pro	Asp	Asn	Thr	Leu	Ala
		50				55					60				
Trp	Val	Trp	Val	Arg	Gly	Leu	Asp	Glu	Leu	Tyr	Ala	Glu	Trp	Ser	Glu
65				70				75						80	
Val	Val	Ser	Thr	Asn	Phe	Arg	Asp	Ala	Ser	Gly	Pro	Ala	Met	Thr	Glu
				85				90						95	
Ile	Gly	Glu	Gln	Pro	Trp	Gly	Arg	Glu	Phe	Ala	Leu	Arg	Asp	Pro	Ala
			100					105						110	
Gly	Asn	Cys	Val	His	Phe	Val	Ala	Glu	Glu	Gln	Asp				
		115					120								

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<211> 134

<212> PRT

<213> Staphylococcus aureus plasmid pUB110

<400> 32

Met Arg Met Leu Gln Ser Ile Pro Ala Leu Pro Val Gly Asp Ile Lys
1 5 10 15
Lys Ser Ile Gly Phe Tyr Cys Asp Lys Leu Gly Phe Thr Leu Val His
20 25 30
His Glu Asp Gly Phe Ala Val Leu Met Cys Asn Glu Val Arg Ile His
35 40 45
Leu Trp Glu Ala Ser Asp Glu Gly Trp Arg Ser Arg Ser Asn Asp Ser
50 55 60
Pro Val Cys Thr Gly Ala Glu Ser Phe Ile Ala Gly Thr Ala Ser Cys
65 70 75 80
Arg Ile Glu Val Glu Gly Ile Asp Glu Leu Tyr Gln His Ile Lys Pro
85 90 95
Leu Gly Ile Leu His Pro Asn Thr Ser Leu Lys Asp Gln Trp Trp Asp
100 105 110
Glu Arg Asp Phe Ala Val Ile Asp Pro Asp Asn Asn Leu Ile Ser Phe
115 120 125
Phe Gln Gln Ile Lys Ser
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<210> 33

<211> 126

<212> PRT

<213> E. coli transposon Tn5

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Met Thr Asp Gln Ala Thr Pro Asn Leu Pro Ser Arg Asp Phe Asp Ser
1 5 10 15
Thr Ala Ala Phe Tyr Glu Arg Leu Gly Phe Gly Ile Val Phe Arg Asp
20 25 30
Ala Gly Trp Met Ile Leu Gln Arg Gly Asp Leu Met Leu Glu Phe Phe
35 40 45
Ala His Pro Gly Leu Asp Pro Leu Ala Ser Trp Phe Ser Cys Cys Leu
50 55 60
Arg Leu Asp Asp Leu Ala Glu Phe Tyr Arg Gln Cys Lys Ser Val Gly
65 70 75 80
Ile Gln Glu Thr Ser Ser Gly Tyr Pro Arg Ile His Ala Pro Glu Leu
85 90 95
Gln Glu Trp Gly Gly Thr Met Ala Ala Leu Val Asp Pro Asp Gly Thr
100 105 110
Leu Leu Arg Leu Ile Gln Asn Glu Leu Leu Ala Gly Ile Ser
115 120 125

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<213> Artificial Sequence

<220>

<223> BRP variant

<400> 34

Asp Phe Val Glu Asp Asp Phe Ala

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<210> 35

<211> 8

<212> PRT

<213> Artificial Sequence

 $\langle 220 \rangle$

<223> BRP variant

<400> 35

Arg Phe Val Glu Asp Asp Phe Ala

5

<210> 36

<211> 8

<212> PRT

<213> Artificial Sequence

$\langle 220 \rangle$

<223> BRP variant

<400> 36

Asp Leu Val Glu Asp Asp Phe Ala

5

<210> 37

<211> 8

<212> PRT

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<223> BRP variant

<400> 37

Asp Ser Val Glu Asp Asp Phe Ala

5

<210> 38

<211> 8

<212> PRT

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Asp Phe Val Glu Gly Asp Phe Ala

1

5

<210> 43

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Asp Phe Val Glu Asp Asp Ser Ala

1

5

<210> 44

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<400> 44

Asp Phe Val Glu Asp Asp Phe Arg

1

5

<210> 45

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5

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<210> 46

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Leu Thr Leu Phe Ile Ser Ala Val Gln Asp
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Val Thr Leu Phe Val Ser Ala Val Gln Asp
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Asp Asn Thr Leu Ala Trp Val Trp Val
1 5

<210> 56
<211> 9
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<400> 56
Asp Asp Thr Leu Gly Trp Val Trp Val
1 5

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Asp Leu Thr Leu Gly Trp Val Trp Val
1 5

<210> 58
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<400> 58
Asp Asn Pro Leu Gly Trp Val Trp Val
1 5


```
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Asp Asn Thr Leu Gly Trp Val Arg Val
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Asp Asn Thr Leu Ala Trp Val Trp Cys
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Thr Glu Ile Gly Glu Gln Pro Trp Gly Arg Glu Phe Ala
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<220>
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Val Glu Ile Gly Glu Gln Pro Trp Gly Arg Glu Phe Ala
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Thr Ser Ile Gly Glu Gln Pro Trp Gly Arg Glu Phe Ala
1 5 10

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Thr Glu Ile Gly Trp Gln Pro Trp Gly Arg Glu Phe Ala
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Thr Glu Ile Gly Glu His Pro Trp Gly Arg Glu Phe Ala
1 5 10

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Thr Glu Ile Gly Glu Gln Pro Leu Gly Arg Glu Phe Ala
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Thr Glu Ile Gly Glu Gln Pro Trp Gly Arg Glu Gly Ala
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Thr Glu Ile Gly Glu Gln Pro Trp Gly Arg Glu Phe Ser
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<210> 75
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<220>
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Cys Phe Val Glu Asp Asp Phe Ala
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<220>
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Gly Phe Val Glu Asp Asp Phe Ala
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Val Ile Leu Phe Ile Ser Ala Val Gln Asp
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Val Thr Leu Phe Ile Ser Thr Val Gln Asp
1 5 10

<210> 81

<211> 10

<212> PRT

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<220>

<223> BRP variant

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Val Thr Leu Phe Ile Ser Ala Leu Gln Asp
1 5 10

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Asp Asn Thr Leu Ala Trp Val Leu Val
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<210> 83

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<400> 83

Asp Asn Thr Ser Gly Trp Val Trp Val
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<210> 84

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Asp Asn Thr Leu Gly Trp Val Leu Val
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<210> 85

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Asp Asn Thr Leu Gly Trp Val Cys Val
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<210> 86

<211> 13

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<220>

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1 5 10

<210> 87

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Thr Glu Leu Gly Glu Gln Pro Trp Gly Arg Glu Phe Ala
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Thr Glu Ile Gly Ser Gln Pro Trp Gly Arg Glu Phe Ala
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<210> 89

<211> 574

<212> PRT

<213> Homo sapiens

<400> 89

Glu Asp Asp Ile Ile Ile Ala Thr Lys Asn Gly Lys Val Arg Gly Met
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Asn Leu Thr Val Phe Gly Gly Thr Val Thr Ala Phe Leu Gly Ile Pro
20 25 30
Tyr Ala Gln Pro Pro Leu Gly Arg Leu Arg Phe Lys Lys Pro Gln Ser
35 40 45
Leu Thr Lys Trp Ser Asp Ile Trp Asn Ala Thr Lys Tyr Ala Asn Ser
50 55 60
Cys Cys Gln Asn Ile Asp Gln Ser Phe Pro Gly Phe His Gly Ser Glu
65 70 75 80
Met Trp Asn Pro Asn Thr Asp Leu Ser Glu Asp Cys Leu Tyr Leu Asn
85 90 95
Val Trp Ile Pro Ala Pro Lys Pro Lys Asn Ala Thr Val Leu Ile Trp
100 105 110
Ile Tyr Gly Gly Gly Phe Gln Thr Gly Thr Ser Ser Leu His Val Tyr
115 120 125
Asp Gly Lys Phe Leu Ala Arg Val Glu Arg Val Ile Val Val Ser Met
130 135 140
Asn Tyr Arg Val Gly Ala Leu Gly Phe Leu Ala Leu Pro Gly Asn Pro
145 150 155 160
Glu Ala Pro Gly Asn Met Gly Leu Phe Asp Gln Gln Leu Ala Leu Gln
165 170 175
Trp Val Gln Lys Asn Ile Ala Ala Phe Gly Gly Asn Pro Lys Ser Val
180 185 190
Thr Leu Phe Gly Glu Ser Ala Gly Ala Ala Ser Val Ser Leu His Leu
195 200 205


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34